

TRANSMITTAL FORM FOR FILING PATENT APPLICATION

Attorney

Docket No.: SYNER-162XX

WEINGARTEN, SCHURGIN, GAGNEBIN &amp; HAYES LLP

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Express Mail No: EL418429697US

Date: August 9, 2000

First Named Inventor or Application

Identifier: James S. Hiscock et al

BOX PATENT APPLICATION

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

Transmitted herewith under 37 CFR § 1.53 for filing is the patent application of:

Inventor: James S. Hiscock, Kiwon Chang, Floyd Backes, Myles Kimmit

Entitled: **SELF SERVICE DATA INTERFACE**

☐ This is a request for filing a ☐ **continuation** ☐ **divisional** ☐ **continuation in-part** application under §1.53(b) of prior Application No. \_\_\_\_\_, filed \_\_\_\_\_ entitled:

Enclosed are:

☒ 14 pages of written description, claims and Abstract, inclusive☒ 2 sheets of ☐ informal ☒ formal drawings of Figs. 1-2 (one set)☒ Oath or Declaration☒ Newly executed (original or copy)☐ Copy from prior application (37 CFR 1.63(d)) (for continuation/divisional).

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

☐ To be filed later☒ Cover sheet and Assignment of the invention to: 3COM CORPORATION

☐ Certified copy of a \_\_\_\_\_ application (if foreign priority is claimed) with letter claiming priority under Rule 55.

☐ Information Disclosure Statement with \_\_\_ citations☐ Preliminary amendment is enclosed.☒ Return receipt postcard☐ Other:

08/60/80  
JCS53 U.S. PRO


JCS56 U.S. PRO  
09/635275  
08/09/00

**TRANSMITTAL FORM FOR FILING PATENT APPLICATION (CONTINUED)**

Attorney

Docket No.: SYNER-162XX

- ☐ Verified statement of Small Entity status (§1.9 and §1.27)
- ☐ Verified statement of Small Entity was filed in prior application. Status still proper and desired
- ☐ Priority is claimed under 35 USC § 120 as indicated on the attached sheet 4.
- ☐ Priority is claimed under 35 USC §119(a)-(d) as indicated on the attached sheet 4.
- ☒ Priority is claimed under 35 USC §119 (e) as indicated on the attached sheet 4.
- ☒ James F. Thompson is hereby appointed Associate Attorney by:  
Registration No.: 36,699

  
Attorney of Record: Victor B. Lebovici  
Registration No.: 30,864

- ☐ **Power of Attorney** in the originally-filed application has been granted to one or more of the registered attorneys listed below. The attorneys listed below not previously granted power in the originally-filed application, as well as \_\_\_\_\_, are hereby given associate power:  
Registration No.:

Stanley M. Schurgin, Reg. No. 20,979  
Charles L. Gagnebin III, Reg. No. 25,467  
Paul J. Hayes, Reg. No. 28,307  
Victor B. Lebovici, Reg. No. 30,864

Eugene A. Feher, Reg. No. 33,171  
Beverly E. Hjorth, Reg. No. 32,033  
Holliday C. Heine, Reg. No. 34,346  
Gordon R. Moriarty, Reg. No. 38,973

CLAIMS FILED:	MINUS BASE:	EXTRA CLAIMS:	RATE:	BASIC FEE:
				\$690.00
Independent	2 - 3	= -0-	x \$78.00 =	-0-
Total	20 - 20	= -0-	x \$18.00 =	-0-
<input type="checkbox"/> Multiple Dependent Claims (1st presentation)			+ \$260.00 =	-0-
SUBTOTAL FILING FEE				\$690.00
Small Entity filing, divide by 2. (Note: verified statement must be attached per §1.9, §1.27, §1.28.)				
TOTAL Filing Fee				\$690.00

Attorney Docket No.: SYNER-162XX

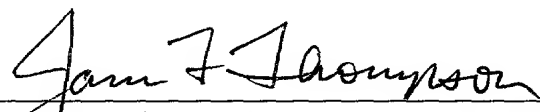
**TRANSMITTAL FOR FILING PATENT APPLICATION (CONTINUED)**

- ☒ [X] The filing fee has been calculated above; a check in the amount of \$690.00 is enclosed.
- ☐ [ ] The filing fee will be submitted at a later date.
- ☒ [X] In the event a Petition for Extension of Time under 37 CFR §1.17 is required by this paper and not otherwise provided, such Petition is hereby made and authorization is provided herewith to charge Deposit Account No. 23-0804 for the cost of such extension.
- ☒ [X] The Commissioner is hereby authorized to charge payment of any additional filing fees under 37 CFR §1.16 associated with this communication or credit any overpayment to Deposit Account No. 23-0804.

☒ [X] **Customer Number 207**

Address all future communications to:

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Attorney of Record: James F. Thompson  
Registration No. 36,699

Attorney Docket No.: SYNER-162XX

TRANSMITTAL FOR FILING PATENT APPLICATION (CONTINUED)

[ ] Priority is claimed under 35 USC § 120 of prior Application(s)  
No. \_\_\_\_\_, filed \_\_\_\_\_, entitled:

[ ] The above-identified application(s) is/are assigned of record to:

[ ] Priority is claimed under 35 USC § 119 (a)-(d) of the following application(s).

_____	_____	_____
(Application Number)	(Country)	(Filing Date)
_____	_____	_____
(Application Number)	(Country)	(Filing Date)
_____	_____	_____
(Application Number)	(Country)	(Filing Date)

[ ] The above-identified application(s) is/are assigned of record to:

[X] Priority is claimed under 35 USC § 119 (e) of the following provisional application(s).

60/201,956	May 5, 2000
(Application Number)	(Filing Date)
_____	_____
(Application Number)	(Filing Date)
_____	_____
(Application Number)	(Filing Date)

[ ] The above-identified provisional application(s) is/are assigned of record to:

[ ] The claim of small entity status in the above-identified provisional application(s) is made in this application and a copy of the small entity form(s) from the provisional application(s) is/are enclosed.

SUBMIT IN TRIPLICATE  
VBL/raw 231470-1

TITLE OF THE INVENTION  
**Self Service Data Interface**

CROSS REFERENCE TO RELATED APPLICATIONS

5 This application claims priority under 35 U.S.C. §119(e)  
of Provisional Patent Application No. 60/201,956, filed May 5,  
2000, entitled "Self Service Data Interface and Flexible Data  
Outlet".

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

--Not Applicable--

BACKGROUND OF THE INVENTION

10 The present invention is related to the field of  
communications between a personal data device such as a  
personal or hand-held computer and a data infrastructure such  
as a computer network in a company or building.

15 Increasingly, computer networks are being used by  
organizations in conducting their internal and external  
business activities. As the use of computer networks has  
grown, demand for skilled workers to operate and maintain the  
networks has increased significantly. Organizations are faced  
20 with significant costs of attracting and retaining necessary  
workers, and uncertainty whether the organizations' needs for  
skilled workers can be met at all. These costs and  
uncertainties may render it difficult or impossible for some  
organizations to make desired investments in computer  
25 networking technology. Such organizations may be placed at a  
competitive disadvantage, or may find that their very viability  
has become uncertain.

**Express Mail Number**

**EL418429697US**

BRIEF SUMMARY OF THE INVENTION

In accordance with the present invention, a "self service" interface between users' personal data devices and a data infrastructure is disclosed that improves the openness and ease of use of the data infrastructure, thereby enabling wider use of information technology without the high costs and uncertainties described above.

The self service data interface includes communications logic providing communications with a personal data device and with a data infrastructure, such as the set of computer resources attached to a network in a department or building. A processor executes a data interface management process that communicates with the data infrastructure via the communications logic to obtain information about available data services, where the information includes information about how the available data services are accessed. The data interface management process also communicates with the personal data device to provide the information about the available data services to the user. The information can then be used by the personal data device to invoke the services directly via the self service data interface.

One particular advantage of the interface is the ability to monitor status of the data infrastructure as well as the status of the communications with the user. This enables a user to diagnose and correct some types of operational problems without the involvement of operations personnel. Also, information about the status of system problems can be provided to users without requiring the involvement of a system support personnel.

Other features of the disclosed self service interface include the use of multiple communications links to the user, including one or more wire-based links such as Ethernet links and/or one or more wireless data links. This configuration

provides desirable redundancy in the communications with the user, such that a problem on one link can be diagnosed using the other link, for example. As another feature, the information from the self service data interface may be provided in the form of a hypertext page that is easily accessed and handled by a standard browser within the personal data device. Pages may include hot links to enhance ease of use.

Other aspects, features, and advantages of the present invention are disclosed in the detailed description that follows.

#### BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

Figure 1 is a diagram depicting a hierarchical scheme for communications between a user and a data infrastructure in accordance with the present invention; and

Figure 2 is a block diagram of a communications system incorporating the communications scheme of Figure 1.

#### DETAILED DESCRIPTION OF THE INVENTION

The disclosure of Provisional Patent Application No. 60/201,956, filed May 5, 2000, entitled "Self Service Data Interface and Flexible Data Outlet", is incorporated by reference herein.

In Figure 1, a user's personal data device (PDD) 10 is communicatively coupled to a data infrastructure 12. The PDD 10 may be a desktop computer, a portable computer, a palm-top computer or similar device that provides information services to a user. The data infrastructure 12 is a domain of applications programs and other data services. For example, the data infrastructure 12 may extend throughout an organization such as a company or a department, and/or may extend throughout a given physical space such as a set of

offices, an entire building or a campus of buildings. Properly authenticated users within the data infrastructure have access to some or all of the applications programs and data services available therein.

5           Figure 1 shows communications between the PDD 10 and the data infrastructure 12 using the well known multi-layer OSI model. According to this model, layer 7 is known as the "Application" layer, and is the highest layer in terms of abstracting the available communications functionality. Examples of layer-7 functionality include electronic mail (e-mail) and Internet browsers. Layers 6 through 1 in the OSI model are successively less abstract, such that at the lowest layer, layer 1 or the "Physical" (PHY) layer, the service provided is the transmission of a raw bit stream over a physical communications medium such as a copper cable. The multiple levels of communication between the PDD 10 and the data infrastructure 12 are shown in Figure 1 by arrows 14.

10  
15  
20           The data infrastructure 12 includes "layer 8" entities 16 operating above layer 7. The layer 8 entities 16 provide services referred to herein as "User Presentation" services, so named for their functional analogousness to the services of the (Application) Presentation layer 6. Just as layer 6 eases the interaction between applications at layer 7 and session services at layer 5, layer 8 eases the interaction between  
25           users and layer 7 applications and services.

30           The layer 8 entities 16 are responsible for gathering, maintaining, and providing information about layer 7 applications and services available in the data infrastructure 12. A user accesses this information using a specified layer 7 application, such as a browser, in the PDD 10. The information provided at layer 8 may be in the form of Web pages, for example, containing the information about the applications and services available in the data infrastructure 12. A wide



variety of information may be maintained, including for example the names of applications and services that are available, the manner in which these items are accessed, and their respective costs.

5           A layer 8 entity 16 gathers pertinent information by communicating with other layer 8 entities and layer 7 entities within the data infrastructure 12. The layer 8 entity 16 then formats the information in a manner making it accessible to the user. In one embodiment, the information can be formatted as a page of hypertext using the well known Hypertext Markup Language (HTML). A more recently developed language known as Extensible Markup Language (XML) can be used to provide even greater flexibility in the definition and formatting of the layer 8 information. In either case, Layer 7 entities can be identified using hot links, for example. Preferably, a structured naming scheme is used to identify resources. Thus, for example, the links for print services in a facility of a company may be of the form <company name>.<location>.<print service identifier>, while the links for file services at the same location are of the form <company name>.<location>.<file service identifier>. Such a naming plan enhances the ease of use of the system, by enabling experienced users to fairly easily locate system resources.

20           A layer 8 entity 16 can interact with a user in a passive manner, i.e., by responding to the user's initiation of actions. For example, a layer 8 entity 16 may respond to a user's request for information about available e-mail services by searching the data infrastructure for such information, formatting the information and sending the formatted information to the PDD 10. A layer 8 entity 16 can also function in a more active manner. For example, a layer 8 entity 16 can present the user with a dialog box to query the user regarding the types of information and services that the

user finds of interest or is likely to use. Additionally, the user may be asked whether it is desirable to have information presented automatically, for example at some predefined regular interval. In such cases, the layer 8 entity 16 tailors its activity to the user's desires. In particular, the layer 8 entity 16 monitors the layer 8 and layer 7 entities in the data infrastructure 12 to detect changes in the information of interest, and then notifies the user of these changes. For example, the layer 8 entity may inform the user whenever a new e-mail service becomes available, or an existing e-mail service becomes unavailable.

Figure 2 shows a configuration of functional elements implementing the system shown in Figure 1. In Figure 2, a separate "self service data interface" 20 is shown between the PDD 10 and the data infrastructure 12 for ease of description. The self service data interface 20 can be realized as an item apart from the data infrastructure 12, as shown in Figure 2, or it can be part of the data infrastructure 12. As a separate item, the self service data interface 20 may reside in a unit physically close to the PDD 10, such as within a small enclosure forming part of a wall jack to which the PDD 12 can be connected. Alternatively, it may be useful to incorporate the functionality of the self service data interface 20 into a network switch, multiplexer, or similar device to which the PDD 10 is coupled within the data infrastructure 12.

As shown, the PDD 10 includes a browser 22 or similar application for obtaining layer 8 information. The PDD 10 also includes other applications programs 24, such as e-mail, calendar, word processing, etc. The PDD 10 also includes one or more communications interfaces 26. Preferably these include at least one interface to a high-speed wire link, such as an Ethernet link, and at least one wireless data interface. The wireless interface may advantageously employ an emerging

wireless standard referred to as "Bluetooth". One major feature of the Bluetooth standard is its specification of both point-to-point and point-to-multipoint connections, in which up to seven slave devices can communicate with a single master device. Additionally, several such master-slave collections can be linked together to form larger networks. Additionally, the Bluetooth standard specifies two power levels, one suitable for a relatively small area such as a room, and another suitable for a larger area such as a house or a suite of offices, and also includes security features. Although not shown in Figure 2, the PDD 10 includes the necessary protocol stacks for implementing layers 2-6 of the OSI communications model between the communications interfaces 26 and the applications 22 and 24.

The data infrastructure 12 includes a variety of applications and services 28 that are potentially available to a user of the PDD 10. Information about these applications and services are maintained in a site-specific information infrastructure 30. The information infrastructure 30 includes various information about the data infrastructure 12 that may be useful for a user. This information includes sets of instructions 32 for accessing the associated services, status information about the network and the applications, etc. The data infrastructure 12 also includes one or more communications interfaces 34 for communicating with the self service data interface 20 and the PDD 10.

The self service data interface 20 includes user-side communications interfaces 40 coupled to infrastructure-side communications interface(s) 42 by logic 44 that performs arbitration and multiplexing/demultiplexing functions. A data interface management process 46, which may be executed for example on a general-purpose microprocessor 45, is coupled to the logic 44 and is capable of communicating with both the PDD

10 and the data infrastructure 12. The data interface management process 46 monitors the respective statuses of the user-side communications interfaces 40 and the data infrastructure 12, including service access, availability and cost information contained therein. This information is stored in a location within the data infrastructure 12 that is well known to the data interface management process 46. For example, the data interface management process 46 may be configured with pointers to the information, or alternatively may contain a routine that is capable of locating the information. This status information is provided to the PDD 10 where it is displayed or otherwise made available to the user.

One particular function performed by the data interface management process 46 is to track error indications at the communications interfaces 40 and/or 42 and determine whether any detected errors are correctable by the user. For such errors, a listing of corrective action steps is supplied to the user via one of the interfaces 40, if possible. For example, it may be that an Ethernet cable between the PDD and the self service data interface 20 is not properly connected. If there is a wireless link established between the PDD and the self service data interface 20, then this link is used to provide instructions to the user for correctly installing the cable. For errors that are not correctable by the user, the user can be given information about the error, the system process by which the error is to be corrected, and the status of the process. For example, the user may be informed about the date and time the error was detected, whether an operator or maintenance person has been notified, the expected time by which the error should be fixed, and perhaps a telephone number or link to a person who can provide more information if desired.

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CLAIMS

What is claimed is:

1. A self service data interface, comprising:

5 first communications logic operative to provide communications with a personal data device;

second communications logic operative to provide communications with a data infrastructure in a neighborhood of the self service data interface, the second communications logic being coupled to the first communications logic to enable communications between the personal data device and the data infrastructure; and

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20 a processor coupled to the first and second communications logic, the processor being operative to execute a data interface management process including (i) interacting with the data infrastructure via the second communications logic to obtain information about available data services, the information including information describing the manner in which the available data services are accessed, and (ii) interacting with the personal data device via the first communications logic to provide the information about the available data services to a user of the personal data device.

25 2. A self service data interface according to claim 1, wherein the first communications logic includes at least first and second communications interfaces, the first communications interface interfacing to a wire link, and the second communications interface interfacing to a wireless link.

3. A self service data interface according to claim 2, wherein the wire link employs a carrier-sense multiple-access communications protocol.

5 4. A self service data interface according to claim 2, wherein the wireless link employs a master-slave communications protocol.

10 5. A self service data interface according to claim 1, wherein the information about the available data services provided to the personal data device is formatted as a hypertext page.

15 6. A self service data interface according to claim 5, wherein the hypertext page is a hypertext markup language (HTML) page.

20 7. A self service data interface according to claim 5, wherein the hypertext page is an extensible markup language (XML) page.

25 8. A self service data interface according to claim 1, wherein the information about the available data services provided to the personal data device includes hot links to locations within the data infrastructure at which the services can be accessed.

30 9. A self service data interface according to claim 8, wherein the hot links include text formatted according to a structured naming scheme.

35 10. A self service data interface according to claim 1, wherein the data interface management process further includes monitoring the status of the communications with the personal data device.

11. A self service data interface according to claim 1, wherein the data interface management process further includes monitoring the status of identified problems in the data infrastructure, and providing information reflecting the monitored status to the personal data device for use by the user.

12. A method by which a user of a personal data device obtains information about and access to data services available in a data infrastructure to which the personal data device is coupled, comprising:

storing information about the available data services in a data infrastructure, the information including information describing the manner in which the available data services are accessed;

providing the information stored in the data infrastructure to a user presentation entity responsible for informing the user about the available data services including the manner in which they are accessed, the user presentation entity storing the information in a format enabling ready retrieval and perusal by the user;

providing the information stored in the user presentation entity to a cooperating entity in the personal data device for presentation to the user;

generating, at the personal data device, a message containing information provided from the user presentation entity identifying a service to be accessed in the data infrastructure, and sending the message to the data infrastructure; and

upon receipt of the message from the personal data device at the data infrastructure, invoking the identified service and enabling the identified service to communicate with a



cooperating entity in the personal data device for user interaction with the identified service.

13. A method according to claim 12, wherein the entity  
5 cooperating with the user presentation entity is a browser.

14. A method according to claim 12, wherein the information  
about available data services provided to the personal data  
device is formatted as a hypertext page.

15. A method according to claim 14, wherein the hypertext page  
is a hypertext markup language (HTML) page.

16. A method according to claim 14, wherein the hypertext page  
is an extensible markup language (XML) page.

17. A method according to claim 12, wherein the information  
about available data services provided to the personal data  
device includes hot links to locations within the data  
infrastructure at which the services can be accessed.

18. A method according to claim 17, wherein the hot links  
include text formatted according to a structured naming scheme.

19. A method according to claim 12, further comprising  
25 monitoring, by the user presentation entity, of status of the  
communications with the personal data device.

20. A method according to claim 12, further includes  
30 monitoring, by the user presentation entity, of status of  
identified problems in the data infrastructure, and providing  
information reflecting the monitored status to the personal  
data device for use by the user.

ABSTRACT OF THE DISCLOSURE

5 A self service data interface includes communications logic providing communications with a personal data device and a data infrastructure, such as the computer resources in a department or building. A processor executes a data interface management process that communicates with the data infrastructure to obtain information about available data services, where the information includes information about how the available data services are accessed. The data interface management process also communicates with the personal data device to provide the information about the available data services to the user. The information is used by the personal data device to invoke the services directly via the self service data interface. The self service interface can have multiple communications links to the personal data device, such as a wire link and a wireless link. The information from the self service data interface can be provided as a hypertext page that is accessed and handled by a browser within the personal data device.

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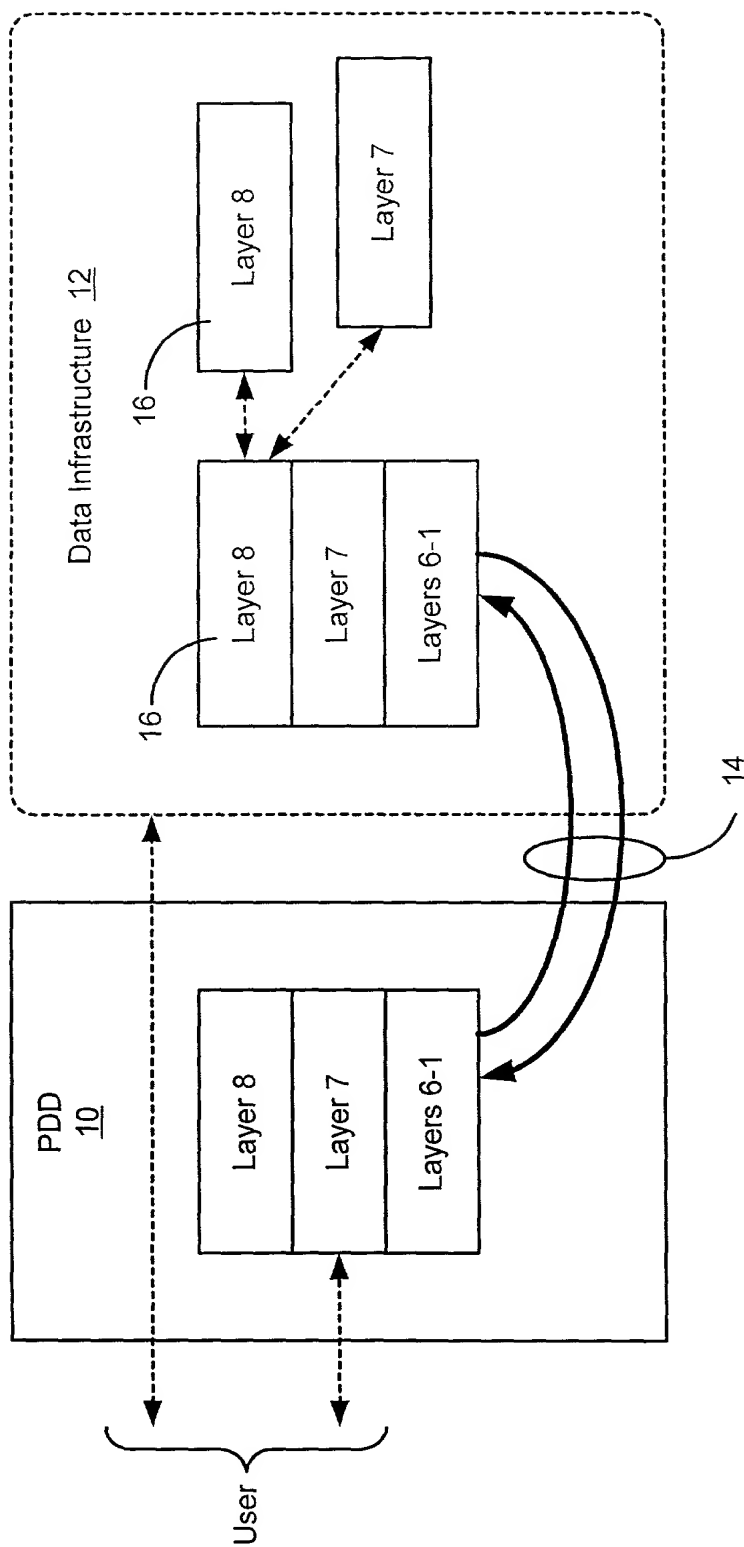


Fig. 1

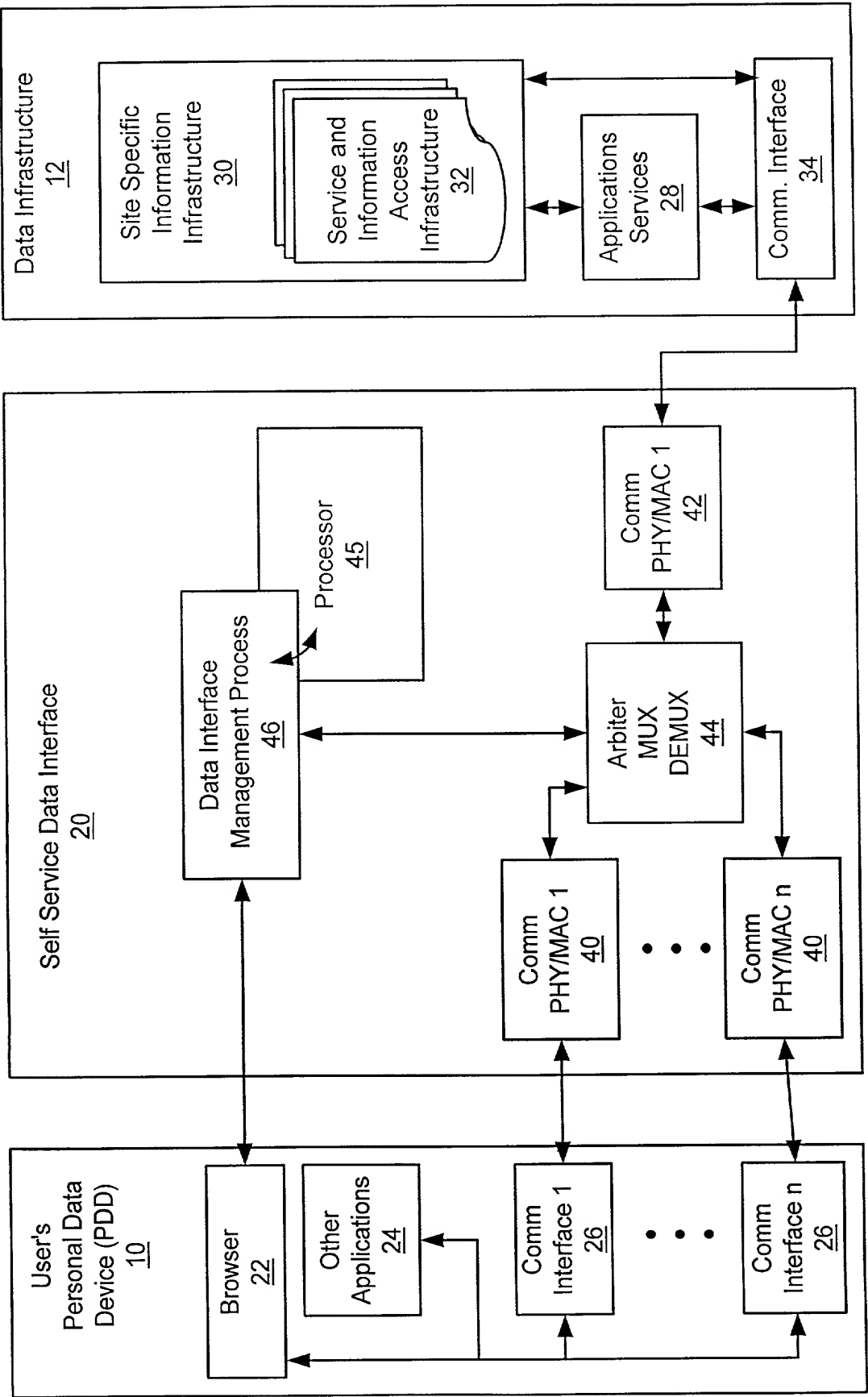


Fig. 2

Attorney  
Docket No.: SYNER-162XX

**DECLARATION AND POWER OF ATTORNEY**

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**SELF SERVICE DATA INTERFACE**

the specification of which (check one):

☒ is attached hereto. ☐ was filed \_\_\_\_\_ as Application No. \_\_\_\_\_;  
amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations §1.56(a).

I hereby claim foreign priority benefits under Title 35, USC §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>	<u>Date Filed</u>	<u>Priority Claimed</u>
_____ (Number)                      (Country)	_____ (Day/Month/Year)	<input type="checkbox"/> <input type="checkbox"/> Yes      No
_____ (Number)                      (Country)	_____ (Day/Month/Year)	<input type="checkbox"/> <input type="checkbox"/> Yes      No
_____ (Number)                      (Country)	_____ (Day/Month/Year)	<input type="checkbox"/> <input type="checkbox"/> Yes      No

I hereby claim the benefit under Title 35, USC §119(e) of any United States provisional application(s) listed below:

60/201,956 _____ (Application Number)	May 5, 2000 _____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

**Express Mail Number**

E1418429697US

Attorney

Docket No.: SYNER-162XX

I hereby claim the benefit under Title 35 USC §120 of any United States application(s) listed below and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 USC §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____ (Application No.)	_____ (Filing Date)	_____ (Patented/pending/abandoned)
_____ (Application No.)	_____ (Filing Date)	_____ (Patented/pending/abandoned)
_____ (Application No.)	_____ (Filing Date)	_____ (Patented/pending/abandoned)

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business connected therewith in the Patent and Trademark Office, and to file with the USRO any International Application based thereon.

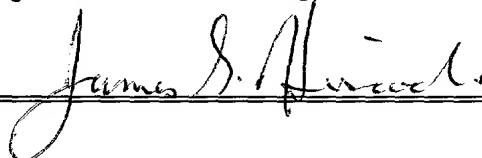
Stanley M. Schurgin, Reg. No. 20,979  
 Charles L. Gagnebin III, Reg. No. 25,467  
 Paul J. Hayes, Reg. No. 28,307  
 Victor B. Lebovici, Reg. No. 30,864

Eugene A. Feher, Reg. No. 33,171  
 Beverly E. Hjorth, Reg. No. 32,033  
 Holliday C. Heine, Reg. No. 34,346  
 Gordon R. Moriarty, Reg. No. 38,973

Address all correspondence to:

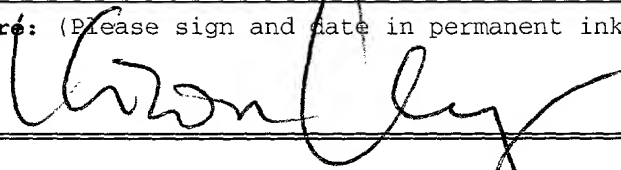
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of First Inventor: James S. Hiscock		
City of Residence Rockport	State or Country Massachusetts	Country of Citizenship USA
Post Office Address 11 Penzance Road	City Rockport	State or Country    Zip Code Massachusetts        01966
Signature: (Please sign and date in permanent ink.) X 		Date signed: X July 7, 2000

Attorney

Docket No.: SYNER-162XX

Full Name of Second Inventor: Kiwon Chang		
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Post Office Address 62 Rivard Road	City Needham	State <b>or</b> Country    Zip Code Massachusetts        02192
<b>Signature:</b> (Please sign and date in permanent ink.) X 		<b>Date signed:</b> X 7/17/00

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Attorney

Docket No.: SYNER-162XX

Full Name of Fourth Inventor: Myles Kimmit		
City of Residence Shewsbury	State <b>or</b> Country Massachusetts	Country of Citizenship USA
Post Office Address 1 Kemble Drive	City Shewsbury	State <b>or</b> Country    Zip Code Massachusetts        01545
Signature: (Please sign and date in permanent ink.) <b>x</b> <i>Myles Kimmit</i>		Date signed: <b>x</b> 7/17/2020

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